

Amendments to the Claims:

This listing of claims will replace all prior versions and listings of claims in the application:

Listing of Claims:

- 1 (currently amended): A method for setting a pixel clock of a display driving circuit, the
5 display driving circuit being used to drive a display device, the method comprising:
- (a) deriving a predetermined pixel clock from a display mode setting set by the display device;
 - (b) generating a reference clock, and using a plurality of scaling factors for respectively adjusting a frequency value of the reference clock to generate a plurality of
10 calculation results, wherein the scaling factors are generated by using a plurality of first coefficients M and a plurality of second coefficients N, the first coefficients M are used to increase the frequency value, the second coefficients N are used to decrease the frequency value, and the first coefficients M and the second coefficients N are natural numbers;
 - (c) using a plurality of ~~first~~ third coefficients R for respectively right-shifting R bits
15 of the calculation results to generate a plurality of quotients, the third coefficients R being natural numbers, wherein the first coefficients M, the second coefficients N, and the third coefficients R form a plurality of combinations, and the combinations are calculated within a plurality of loop operations to generate the quotients;
 - ~~(d) comparing a plurality of differences between the quotients and the predetermined~~
20 ~~pixel clock for obtaining an optimum quotient;~~
using a first difference between a quotient and the predetermined pixel clock which is calculated in a first loop operation as a minimum difference;
if a second difference between a quotient and the predetermined pixel which is calculated in a second loop operation after the first loop operation is less than the first
25 difference, using the second difference to update the minimum difference;
recording values of the first coefficients M, the second coefficients N, the third coefficients R, and the minimum difference for each loop operation;

after all of the loop operations are executed, using a quotient associated with the minimum difference as the optimum quotient; and

(e) using a scaling factor and a ~~first~~ third coefficient R corresponding to the optimum quotient for generating an actual pixel clock used to drive the display device.

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2 (cancelled).

3 (currently amended): The method of ~~claim 2~~ claim 1 wherein the scaling factors correspond to $(M+2)/(N+2)$, ~~and the second coefficients M and the third coefficients N~~
10 ~~are integers.~~

4-5 (cancelled).

6 (currently amended): A method for setting a pixel clock of a display driving circuit, the
15 display driving circuit being used to drive a display device, the method comprising:

(a) deriving a predetermined pixel clock from a display mode setting set by the display device;

(b) generating a reference clock, and using a plurality of first coefficients R for respectively right-shifting R bits of a frequency value of the reference clock to generate a
20 plurality of quotients, the first coefficients R being natural numbers;

(c) using a plurality of scaling factors for respectively adjusting the quotients to generate a plurality of calculation results, wherein the scaling factors are generated by using a plurality of second coefficients M and a plurality of third coefficients N, the second coefficients M are used to increase the frequency value, the third coefficients N
25 are used to decrease the frequency value, and the second coefficients M and the third coefficients N are natural numbers, wherein the first coefficients R, the second coefficients M, and the third coefficients N form a plurality of combinations, and the combinations are calculated within a plurality of loop operations to generate the

quotients;

~~(d) comparing a plurality of differences between the calculation results and the predetermined pixel clock for obtaining an optimum calculation result;~~

using a first difference between a quotient and the predetermined pixel clock which
5 is calculated in a first loop operation as a minimum difference;

if a second difference between a quotient and the predetermined pixel which is
calculated in a second loop operation after the first loop operation is less than the first
difference, using the second difference to update the minimum difference;

10 recording values of the first coefficients R, the second coefficients M, the third
coefficients N, and the minimum difference for each loop operation;

after all of the loop operations are executed to calculate the differences, using a
quotient associated with the minimum difference as the optimum quotient; and

(e) using a scaling factor and a first coefficient R corresponding to the optimum
calculation result for generating an actual pixel clock used to drive the display device.

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7 (cancelled).

8 (currently amended): The method of ~~claim 7~~ claim 6 wherein the scaling factors
correspond to $(M+2)/(N+2)$, ~~and the second coefficients M and the third coefficients N~~
20 ~~are integers.~~

9-10 (cancelled).